REMARKS

Claims 1-35 are currently pending in the present application and are presently under consideration. Claims 1, 19, and 33 have been cancelled herein. Claims 2 and 20 have been recast in independent form, and include limitations of cancelled claims 1 and 19, respectively. Claim 32 has been amended to include limitations of cancelled claim 33. Claims 4, 7-9, and 18 have been amended to depend upon claim 2. Similarly, claims 21-23 and 28 have been amended herein to depend upon claim 20. Claims 4, 10-17, and 29-31 have also been amended herein, where such amendments are cosmetic in nature and are not intended to alter scope of such claims. All pending claims with status identifiers are located at pages 2-8.

Favorable reconsideration is requested in view of the amendments and comments below.

I.   Rejection of Claims 1, 7-8, 18-19, 21-28, 32-33, and 35 under 35 U.S.C. §102(e)

Claims 1, 7-8, 18-19, 21-28, 32-33, and 35 stand rejected under 35 U.S.C. §102(e) as being anticipated by Paatelma (US 6,463,042 B1). Withdraw of this rejection is respectfully requested for at least the following reasons. Independent claims 1 and 19 have been cancelled herein, and dependent claims 2 and 20 have been recast in independent form and include limitations of the aforementioned cancelled claims. Independent claim 35 has been amended to include a limitation substantially similar to that found in claim 20. Accordingly, with respect to claims 7-8 and 21-28, this rejection is moot. Independent claim 32 has been amended to include limitations of cancelled claim 33. With respect to amended claim 32, Paatelma neither discloses nor suggests each and every element of applicant's invention as claimed.

> For a prior art reference to anticipate, 35 U.S.C. §102 requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950 (Fed. Cir. 1999) (*quoting*

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Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628, 631,
2 USPQ2d 1051, 1053 (Fed. Cir. 1987)).

In particular, Paatelma does not disclose, teach, or suggest *means for determining transmission power levels of a first and second portion... of a data packet... based on a desired transmission range for both the first and second portion* as recited in claim 32. The present invention as claimed facilitates providing a uniform transmission range to a data packet, wherein the data packet is transmitted in portions associated with disparate data rates. For example, an IEEE 802.11 packet includes a preamble portion, a header portion, and a data portion, which are each delivered at different data rates. At a fixed transmission power, these different portions have disparate transmission ranges. By *determining transmission power levels of a first and second portion... based on a desired transmission range for both the first and second portion,* the present invention as claimed can provide a uniform transmission range for two or more portions of the data packet that are delivered at disparate data rates. For instance, the present invention as claimed can calculate a desired transmission range for an entire data packet, and thereafter *dynamically adjust the transmission power level* of disparate portions within the data packet to effectuate such desired transmission range.

In contrast, Paatelma teaches receiving slots of data, wherein each slot of data has a header portion and a data portion. If a receiver detects that the header portion is delivered at a different power level than the data portion, reception of such data portion is terminated. Particularly, Paatelma discloses transmitting a header portion of a data packet at a higher power level than the data portion of the data packet when such data portion does not include valid data. *See* col. 2, lines 32-41. Paatelma nowhere discloses, however, that this differential in power is *determined... based on a desired transmission range for both the first and the second portion* (e.g., based upon a desired transmission range for both the header portion and the data portion). Furthermore, Paatelma does not disclose, teach, or suggest that the power levels of the header and the data portion are *dynamically adjusted... based on a desired transmission range* of the header and data portion.

In view of the foregoing, it is respectfully submitted that Paatelma neither anticipates nor suggests applicant's invention as recited in amended claim 32. Accordingly, this rejection should be withdrawn.

II.   Rejection of Claims 9-17 and 29-31 under 35 U.S.C. §103(a)

Claims 9-17 and 29-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma in view of Fischer, *et al.* (US 5,768,695). Withdrawal of this rejection is requested for at least the following reasons. Claims 9-17 depend from amended claim 2, and Fischer, *et al.* does not make up for the deficiencies of the cited references with respect to such claim as will be described in greater detail *supra.* With respect to claims 29-31, the Examiner has failed to make out a *prima facie* case of obvious under MPEP §706.02(j).

> To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *See In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Particularly, the combination of Paatelma and Fischer, *et al.* does not teach or suggest all the claim limitations of independent claim 29, as neither Paatelma nor Fischer teach or suggest *a PLCP preamble portion that begins transmitting at a first transmission power level and a data portion that begins transmitting at a second transmission power level* as recited in this claim. As described *infra,* Paatelma discloses detecting when a header of a data packet is transmitted at a disparate power level than a data portion of the data packet. Paatelma also teaches that this detection is utilized when

a Quasi-Discontinuous Transmission (Q-DTX) mode of operation is utilized. *See* col. 2, lines 41-54. Thus, power is reduced in a transmission when the data portion does not include valid data. *See* col. 3, lines 36-41. However, Paatelma never discloses that any portion of the data packet is a *PLCP preamble portion*, nor that *PLCP preamble portion begins transmitting at a first transmission power level and a data portion that begins transmitting at a second transmission power level* as claimed.

Accordinlgy, the Examiner cites Fischer, *et al.* to make up for these deficiencies. Like Paatelma, however, Fischer, *et al.* does not disclose, teach, or suggest *a PLCP preamble portion that begins transmitting at a first transmission power level and a data portion that begins transmitting at a second transmission power level.* Rather, Fischer, *et al.* discloses a system and/or methodology for ramping up and ramping down power to various sections of a radio in a wireless network. A PLCP frame format defined by IEEE standard 802.11 is disclosed as an exemplary frame format that can be utilized to transfer data between a MAC device and a radio, but Fischer, *et al.* does not disclose altering power between portions of such format.

The present invention as recited in independent claim 29 provides a system that can transmit data over a uniform range when such data is in PLCP format. The system of claim 29 *dynamically adjusts the transmission power of a packet during transmission of the packet* to facilitate delivering such data portions over a desirable physical range. This *dynamic adjustment of power of a packet during transmission,* wherein the *PLCP preamble portion begins transmitting at a first transmission power level and a data portion that begins transmitting at a second transmission power level* is not disclosed, taught, or suggested in either Paatelma or Fischer, *et al.* Accordingly, this rejection should be withdrawn.

III.   Rejection of Claims 2-5, 20, and 34 under 35 U.S.C. §103(a)

Claims 2-5, 20, and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma in view of Hassan, *et al.* (US 6,301,231). Withdrawal of this rejection is requested for at least the following reasons. Claim 34 depends upon claim 32, which is believed to be in condition for allowance. With respect to amended claims 2

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and 20, neither Paatelma nor Hassan teach or suggest all limitations of the invention as claimed.

In particular, with respect to claim 2, Paatelma and Hassan, *et al.*, alone or in combination, do not disclose, teach, or suggest *a communication unit that transmits a first portion of a data packet at a first data rate and a second portion of the data packet at a second data rate* as recited in this claim. As discussed *infra*, Paatelma discloses detecting when a data portion is transmitted at a lower power level when compared to a header portion of a data packet. The invention of Paatelma is beneficial when a Quasi-Discontinuous Transmission mode of operation is employed by a base station to lessen interference within a network. Paatelma does not disclose that such data portion and header portion are transmitted at disparate data rates. Hassan, *et al.* discloses a method for transmitting data from a ground station to two or more satellites, and then transmitting such data to a disparate ground station. Particularly, a ground station attempts to deliver data to a satellite at a first data rate. If the satellite cannot receive and transmit the data at that data rate, it informs the ground station of a second data rate in which it can receive and transmit the data. The ground station thereafter contacts a second satellite and delivers data to that satellite at a third data rate, wherein summation of the second and third data rates equals the first data rate. This ensures that the ground station transmits data at the desired first data rate, and a second ground station receives the data at the desired first data rate.

Hassan, *et al.* discloses that portions of data are delivered to the satellite at differing data rates. Hassan, *et al.*, however, nowhere discloses *transmitting the first portion of a data packet at a first data rate and a second portion of the data packet at a second data rate.* Rather, the portions of data disclosed by Hassan, *et al.* are a collection of data packets. For example, Hassan, *et al.* discloses that a first portion of data that includes a plurality of data packets is delivered at one data rate while a second portion of data that includes a plurality of data packets is delivered at a second data rate. "Individual data packets that make up part of a data stream may be routed via different intermediate satellites and may therefore arrive at different times or out of sequence." *See* col. 3 line 66 – col. 4, line 2. Hassan, *et al.* never discloses that different *portions of*

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data packets are transmitted at different data rates, but rather discloses that different collections of packets of data are transmitted at different data rates.

Similarly, with respect to claim 20, Hassan, *et al.* does not disclose, teach, or suggest *transmitting a third portion of a data packet at a third transmission power level.* As described above, Hassan, *et al.* does not disclose transmitting disparate portions of data packets at disparate data rates and/or power levels. Rather, Hassan, *et al.* discloses transmitting *a collection of data packets* at disparate rates, and again does not disclose transmitting different portions of a data packet at disparate rates.

As Paatelma and Hassan, *et al,* alone or in combination, do not disclose, teach, or suggest each and every element in claims 2 and 20 (and all claims dependent therefrom), this rejection should be withdrawn.

IV.   Rejection of Claim 6 Under 35 U.S.C. §103(a)

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Paatelma, *et al.* in view of Hassan, *et al.* and further in view of Fischer, *et al.* Withdrawal of this rejection is respectfully requested for at least the following reasons. Claim 6 depends upon claim 2, and Fischer, *et al.* fails to make up for the aforementioned deficiencies with respect to that claim. Accordingly, this rejection should be withdrawn.

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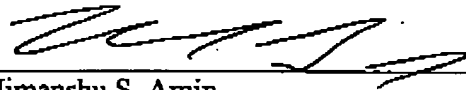
V.   Conclusion

The present application is believed to be condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,

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